



**FIG. 1**

```

graph TD
    30([START]) --> 32[INITIALIZATION]
    32 --> 34[EVALUATE ESTIMATION ACCURACY  
OF CURRENT K, USING THE HISTORICAL  
DATABASE OF USED VEHICLES]
    34 --> 36[COMPUTE AVERAGE  
ERROR FOR K]
    36 --> 38{CHECK FOR  
ERROR  
IMPROVEMENT}
    38 -- YES --> 40[RESET ERROR  
THRESHOLD]
    38 -- NO --> 48([END])
    40 --> 42[ESTIMATE VALUE FOR  
ALL TARGET VEHICLES]
    42 --> 44{CHECK ESTIMATION  
COVERAGE}
    44 -- YES --> 46[SAVE RESULTS  
AND INCREMENT K]
    44 -- NO --> 48
    46 --> 34

```

**FIG. 2**

```

graph TD
    60[FIND NEIGHBORS FOR TARGET VEHICLE] --> 62[SELECT K NEAREST NEIGHBORS]
    62 --> 64{ARE THERE ENOUGH NEIGHBORS?}
    64 -- NO --> 72[REJECT TARGET VEHICLE]
    72 --> 60
    64 -- YES --> 66[ESTIMATE VALUE BASED ON EACH NEIGHBOR]
    66 --> 68[COMPUTE FINAL ESTIMATE FOR TARGET VEHICLE]
    68 --> 70[CALCULATE ESTIMATION ERROR FOR TARGET VEHICLE]

```

**FIG.3**

```

graph TD
    80[FIND NEIGHBORS FOR TARGET VEHICLE] --> 82[SELECT K NEAREST NEIGHBORS]
    82 --> 84{ARE THERE ENOUGH NEIGHBORS?}
    84 -- NO --> 92[REJECT TARGET VEHICLE]
    92 --> 80
    84 -- YES --> 86[ESTIMATE VALUE BASED ON EACH NEIGHBOR]
    86 --> 88[COMPUTE FINAL MARKET VALUE ESTIMATE FOR TARGET VEHICLE]
    88 --> 90[SAVE ESTIMATED MARKET VALUE FOR TARGET VEHICLE]
  
```

**FIG. 4**